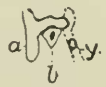
XXII.—*Note on Root-division in the Molar Teeth of* Tritylodon. By Dr. Branislav Petronievics.

The longitudinal root-division in the molar teeth of *Tritylodon* was definitively established by the present writer in a previous paper (comp. "On the Skull of *Tritylodon longævus*," in Ann. & Mag. Nat. Hist. [8] vol. xx., 1917, p. 283). The transverse root-division in the molar teeth of the similar type *Stereognathus*, also established by me in another paper ("Note on the Lower Jaw of *Stereognathus ooliticus*," in Ann. & Mag. Nat. Hist. [9] vol. i., 1918, p. 67), suggested the possibility of the same division in *Tritylodon*. This suggestion was confirmed by a new preparation of the specimen (M. 1951) in the British Museum during my last stay in London in 1920.

The text-figure shows the hinder side of the recently



Section of the penultimate molar of *Tritylodon longævus*, Owen, left side. Nat. size.

prepared penultimate molar of *Tritylodon* situated on the left side of the skull (comp. *l. c.* tooth 5 in text-fig. 2), the same which shows the longitudinal root-division also (comp. the photograph, *l. c.* pl. x. fig. 2). But while in its longitudinal direction it has only two roots, its transverse direction is characterized by three distinct roots (*a*, *b*, *y* in the figure), corresponding to the three longitudinal rows of cusps. The middle root (*b* in the figure)—the shortest of the three—is the largest, is of triangular shape, and shows the closed pulp-cavity in section. The inner root (*a* in the figure), closely applied to the middle one, is of rectangular shape, while the outer (*y* in the figure) is the longest, but in the present state of the specimen unfortunately represented by a small fragment only (in the photograph, *l. c.* pl. x. fig. 2, it was still complete). Behind the penultimate molar in question there was in the specimen a root-impression of the last molar (which has been cut away by the new preparation), showing only an imperfect transverse division of this root.

It is, I think, not necessary to emphasize the importance

of the fact now established for the mammalian character of *Tritylodon*, the transverse root-division of its molars excluding completely any possibility of it being a reptile.

Finally, I desire to express my thanks to Dr. Woodward, of the British Museum, for permission to describe the new preparation (executed by F. O. Barlow); also to Dr. Andrews, of the British Museum, for some valuable help.

XXIII.—*Two new Fishes from New Britain and Japan.*

By J. R. Norman.

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Trachypterus pentastigma, sp. n.

Body decreasing in depth from head to tail, greatest depth (at occiput) $5\frac{1}{2}$ in length. Smooth; belly with a narrow prickly area extending from behind insertion of pelvics nearly to root of caudal. Lateral line complete, armed with small spines in the caudal region. Head higher than long, its length $6\frac{1}{3}$ in length of body; anterior profile nearly vertical. Snout shorter than eye, which is placed above middle of head, and is $\frac{1}{3}$ of its length; interorbital width $\frac{2}{3}$ diameter of eye. Mouth small, nearly vertical; maxillary broad and rounded behind, reaching vertical from anterior third of eye; jaws equal; angle of lower jaw below pupil; both jaws without teeth. Dorsal VI 164; commencing above anterior third of eye and extending almost to base of caudal. Pelvics 6-rayed, inserted just behind base of pectorals. Caudal with 8 elongate rays inserted at right angles to axis of body, longest more than $\frac{1}{2}$ length of body; six short rays below these. Coloration pinkish; five large, round, brown spots on sides of body, two above lateral line, two above anterior part of belly, and one below anterior part of second dorsal; a narrow dark streak along base of entire dorsal fin; all fins pale.

A single specimen, 135 mm. in total length, from Misaki, Japan, collected and presented to the British Museum by Mr. A. V. Insole.

Brachyconger, gen. nov.

Closely related to *Xenoconger*, Regan *, from which it

* Trans. Linn. Soc. ser. 2, Zool. xv. pt. 2, 1912, p. 301; Ann. & Mag. Nat. Hist. ser. 8, x. 1912, p. 381.